

argus

M4

POWER ZOOM
8mm movie camera



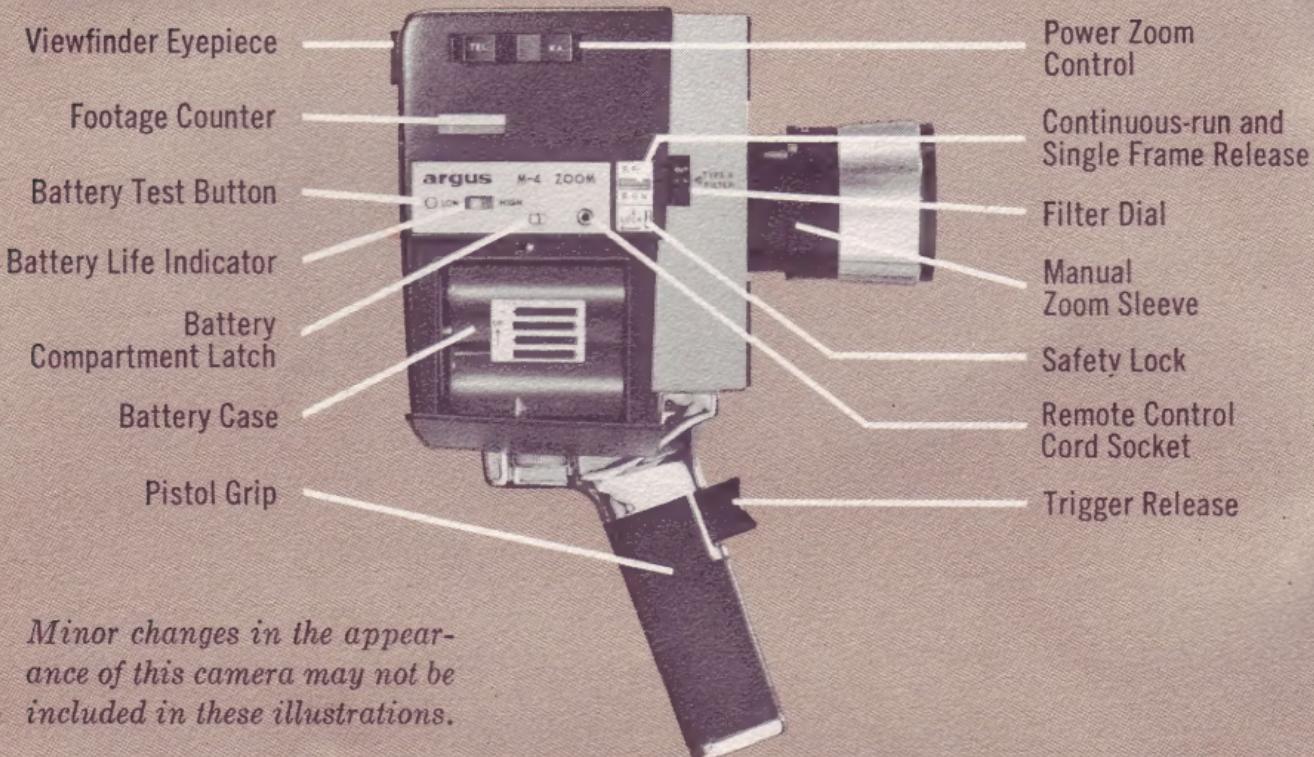
Introduction

Professional-quality movies are yours, every time, with your new Argus M4 Power Zoom movie camera. No more exposure guesswork—the electric eye will set your lens automatically.

The precision Multiscope Zoom lens enables you to get clear and sharp telephoto candids as well as sweeping wide-angle views at the touch of a button. Battery-powered electric drive assures constant and dependable operation.

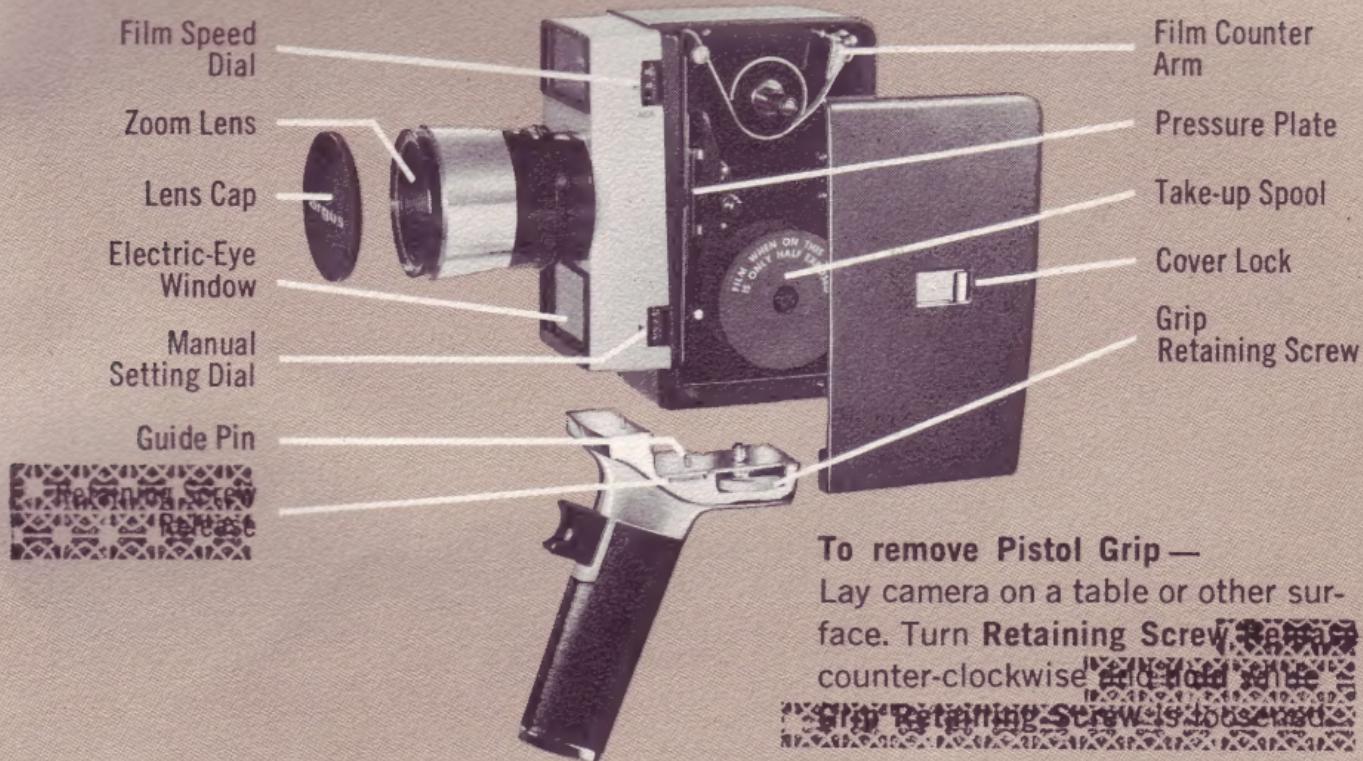
Before taking any movies, won't you take a minute to go over these pages carefully? You'll find easy-to-follow instructions which will help you get the most enjoyment from your camera. If you are filming a special event or going on a trip, expose a practice roll first and check the results. Your dealer will also be glad to help you if you have any other questions.

Here are the important functional parts of your M4. Familiarize



Minor changes in the appearance of this camera may not be included in these illustrations.

yourself with them, as they are referred to throughout this book.



To remove Pistol Grip —

Lay camera on a table or other surface. Turn Retaining Screw counter-clockwise

To Operate Your M4, Here's All You Do...

- 1 **Install the batteries.** Open the **Battery Compartment** and insert four pen-light (size AA) batteries in **Battery Case** (see page 7).
- 2 **Set the film speed.** Make this adjustment by turning the **Film Speed Dial** to the ASA index of your film (see page 8).
- 3 **Load the camera.** Remove the cover and thread film as shown by the diagram inside camera. Complete directions are found on pages 9 and 10.

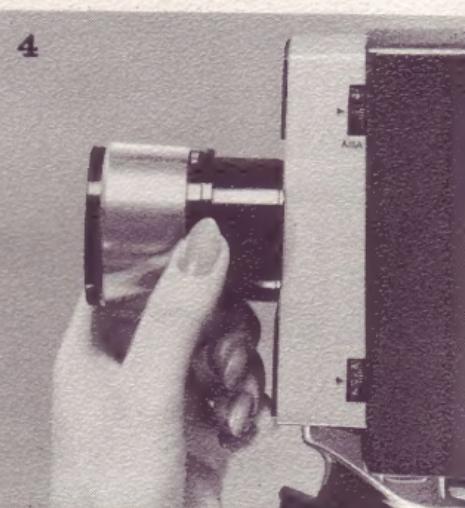
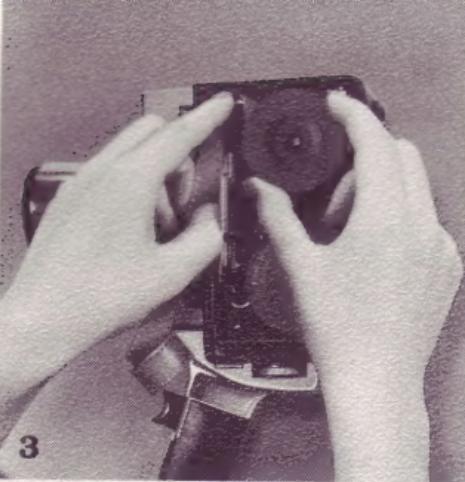
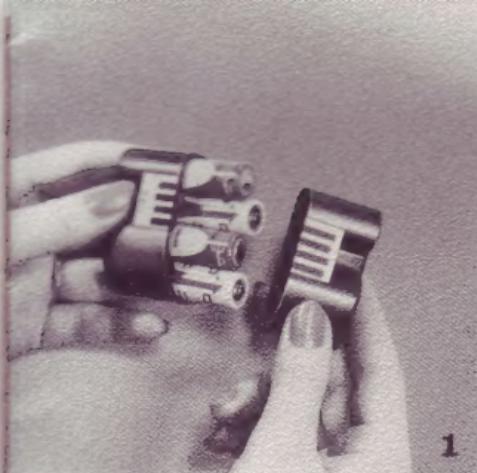
Be sure to remove the lens cap

- 4 **Frame your subject.** Slide the **Manual Zoom Sleeve** forward or back to preview your picture as described on pages 11 and 12.

Take the picture. Check the **Light Level Indicator** in the viewfinder to see that it does not show **red**. Hold the camera steady as shown and press the **Pistol Grip Trigger Release** to take movies (see pages 13 and 14).

Power zoom the lens for wide-angle and telephoto effects by following the information on pages 11 and 12.

For instructions on using the second half of the film and unloading, see pages 16 and 18.



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Installing Batteries

Your M4 uses four 1.5-volt penlight batteries. Several types of batteries can be used. See sheet in battery compartment.

To install batteries, open **Battery Compartment** by sliding latch to right. Lift out **Battery Case** as shown. Open case by grasping ends and pressing in center. Insert batteries following diagram on case. Close and replace in compartment.

By pressing **Battery Test Button**, the **Battery Life Indicator** shows condition of batteries. When needle drops into red area batteries need replacement.

Choosing Your Film

Your M4 uses standard double 8mm roll film available from your photo dealer.

Very probably you will want to start out using color film in your camera. Color films in 8mm size are available in Daylight-type and Type A. Use a Daylight-type film for outdoor movies and Type A film when taking movies indoors using movie lights or photoflood lamps for illumination.

Type A film can also be used outdoors with the built-in Type A Conversion Filter in place. Just turn the Type A Filter Dial to the "IN" position.

Your M4 is designed to accept color films with speeds from ASA 10 to 40—when **Manual Setting Dial** is set on AUTO. (automatic electric-eye operation). If you are using Kodachrome Daylight color film

(ASA 10), set the **Film Speed Dial** to "10." If you have Kodachrome Type A (indoor) film in your camera, turn the dial until "16" appears. For other films with different speeds, use the setting recommended by the film manufacturer.

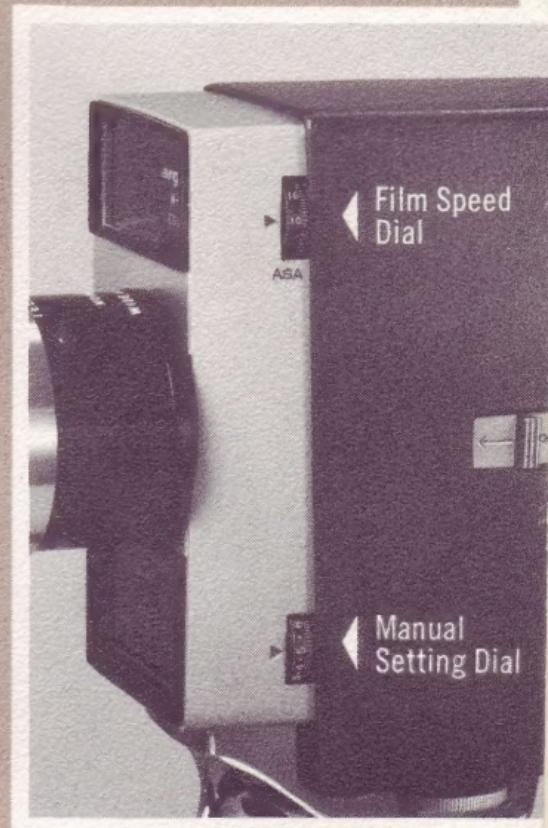
Note: You will find the numbers 2 through 8 by turning the **Manual Lens Setting Dial**. These numbers are **not** to be used for automatic electric-eye operation, but only to set the lens **manually** (see page 17).

Setting the Film Speed

Color Films	Daylight	Tungsten
Kodachrome Daylight	10	—
Kodachrome Type A	10*	16
Kodachrome II Daylight	25	—
Kodachrome II Type A	25*	40
Ansco Moviechrome 8 Daylight	20	—
Ansco Moviechrome 8 Type A	—	16

* Use the built-in Type A filter when using Type A film outdoors.

Set ASA Tungsten film speed when using movie lights or photofloods.

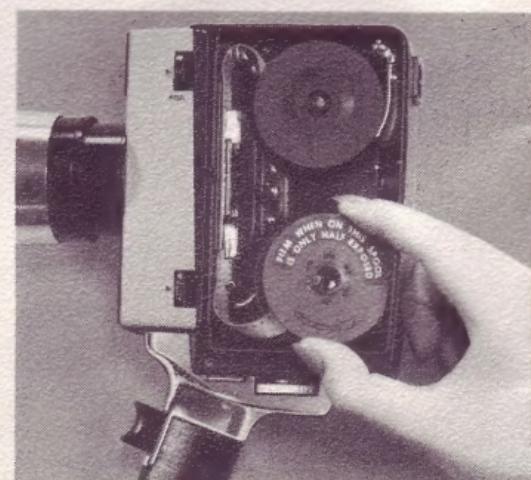
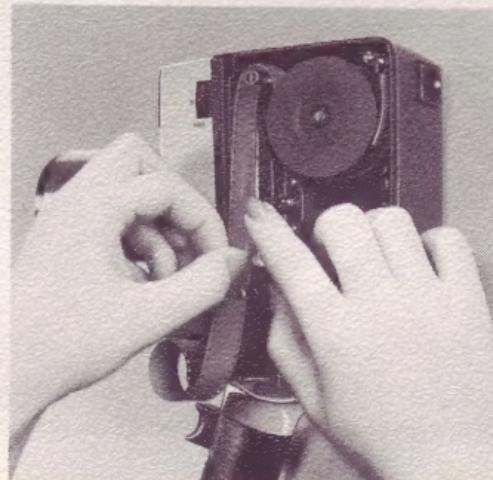


Loading Your Camera

Your camera should be loaded in subdued light—never in direct, bright sunlight.

1 Unlock the camera cover by sliding the **Cover Lock** to the right. Remove the cover by lifting **straight up**. Take the empty take-up spool out of the camera. Remove the new film from the box and can and remove the paper band (or tape) from film.

2 Move the **Footage Counter Lever** (inside the camera) away from the **Upper Spindle** until it locks in place. Hold the full spool and carefully pull out about a foot of film leader. **Be careful not to let the film unwind from the spool while loading.**



At the same time you place the full spool into the four-notch hole facing upward on the **Upper Spindle**, thread the length of leader over the **Upper Guide Roller**, down between the **Aperture Plate** and **Pressure Plate**, and then around the **Lower Guide Post**. See diagram in camera.

Next, hold back the **Pressure Plate** with your forefinger and carefully push the film **all the way** down until it is properly seated and under lip of **Aperture Plate**.

Hold the empty take-up spool so that side reading "Film When On This Spool..." is facing upward. Thread the film end into the slot of the take-up spool and wind the film around the spool clockwise; then place the spool on the lower spindle. Take up the slack by turning the spool with your finger in the direction of arrow.

With the camera cover off, press the **Trigger** or **Continuous-run Release** and run off a few inches of film to see if it is moving properly through the mechanism. Replace the cover (place straight down on body) and lock it by pushing lock to left.

With the camera cover on, the **Footage Indicator** will read S (Start). Press the **Trigger** or **Continuous-run Release** until the indicator reads "O". You are now ready to take movies. As you expose the film, the number shown is the number of feet of film you have exposed on that side of the roll. Continue taking movies until the indicator reads "25".

When you have run the film through the camera once, only one-half of it is exposed. Turn the spool over and reload once again as shown here. See pages 16 and 18.



Viewing and Zooming

The Argus Multiscope Zoom Lens on your M4 camera allows a single lens to do the work of several lenses. You can take movies from wide angle to telephoto without taking a step. The lens and viewfinder zoom together, so you always know what you are filming.

Using your thumb and forefinger, slide the **Manual Zoom Sleeve** forward or back until the view you wish to take appears in the view-finder. The illustrations show the approximate coverage at each lens position.

To zoom the lens, start the film in motion by pressing either the **Trigger** or **Continuous-run Release**. Then press either end of the **Power Zoom Control**—front for wide angle and rear for telephoto. **Power zooming can be done only when either release is depressed and the film is in motion.**



When making movies of a particular scene, you may want first to use the wide angle position to get an overall "location" shot, then power zoom in for a normal view, and, finally, a real "close-in" telephoto look. By using a preset pattern of scenes, you will add both interest and variety to your movies. Use the normal lens position for most average movies.



Always center your subject in the view-finder when using the zoom feature. Try to avoid excessive zooming whenever possible since this sometimes can be distracting when the film is projected. When taking movies at the telephoto position, hold the camera very steady since any movement at this setting is more noticeable than at the normal or wide angle setting.



Taking the Picture

Sight through the viewfinder and frame your picture. Preselect your view by sliding the **Manual Zoom Sleeve** either forward or backward. Hold the camera steady with the **Pistol Grip**, leaving one hand free to operate the **Power Zoom Control**. Start the film in motion by pressing the **Trigger Release** with the index finger. If you wish to take scenes from normal to wide angle or telephoto, press the **Power Zoom Control**, as shown, for the effect wanted.

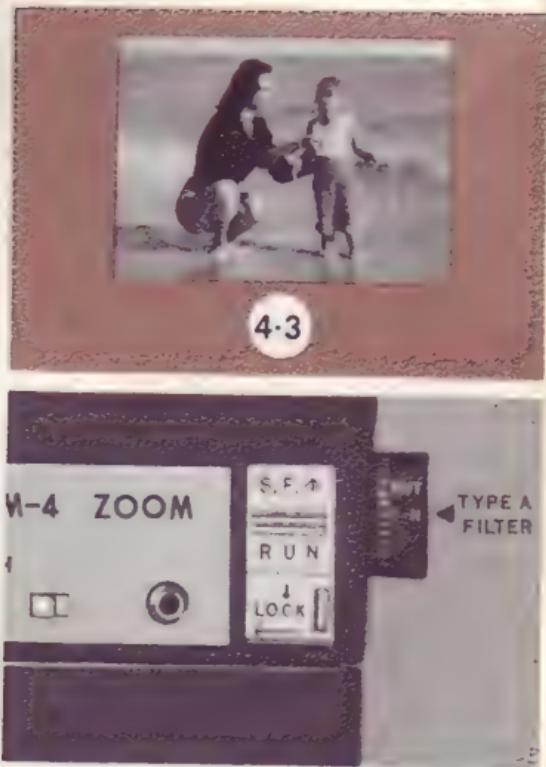
You can also press down on the **Continuous-run Release** and slide the **Safety Lock** as shown by the arrow (left) and the camera will continue to run—this lets you get into your own movies if the camera is on a tripod. Slide the lock to the right to unlock. (Slide **Safety Lock** to left to prevent accidental release.)

The **Light Level Indicator**, found in the viewfinder just below the picture field, shows the lens opening being set by the electric eye.

The indicator will show **red** if the light level in the scene to be taken is too low or too high for good movies. If the **Type A** conversion filter is in place, the indicator will also show **green**. Always check the **Light Level Indicator** before taking movies.

By pressing **upward** on the **Continuous-run Release**, you expose just a single frame at a time. By operating your camera in this manner, you can take special effects such as animations, titles, and such techniques as time-lapse movies. Have the camera on a tripod when using this release. See your photo dealer for additional information on this type of photography.

The socket next to **Safety Lock** will accept a special **Remote Control Cord** (available through your dealer).





Tips for Better Movies

Always hold the camera as steady as possible when taking pictures. Any slight wavering of the camera will be very obvious in your movies when projected on the screen. Use a tripod whenever possible. Tripod sockets are built into both the camera base and pistol grip.

Take pictures with the sun behind you whenever possible. The electric eye can "read" the scene more accurately if this rule is followed.

"Panning" is the term used when the camera is moved horizontally or vertically when making movies. This should be done slowly and carefully to avoid unwanted effects as jerking movements and blurring of the projected picture.

Time your scenes so that they are at least five seconds in length. It is better to shoot longer scenes since they can always be cut when editing.

Plan your movies in advance to add a feeling of continuity to them. Try filming your movies in a story sequence instead of a series of unrelated scenes.

When taking movies indoors with a light bar or photoflood lamps, be sure you have indoor Type A film in the camera and the film speed is set correctly. Turn the **Type A Filter Dial** to the "out" position. The electric eye sets the exposure for you. Keep your subject closer to the background than it is to the camera to assure even lighting.

Using Second Half of Film



When the **Footage Counter** points to "25", you have completely exposed that side of the film. **Do not take any more movies.** However you **must** run the camera until the indicator reads "E" **before you open the cover.** In subdued light, carefully remove both spools and transfer the empty spool to the lower spindle. **Turn over** the spool containing the film and reload the camera as before (see page 9). When the entire film is exposed, unload camera as described on page 18.

Using Manual Lens Openings

When your subject is against an extremely light or dark background, better movies can be obtained by setting the lens manually as follows:

1 With the **Manual Setting Dial** on **AUTO**, step up close to your subject, about 8 to 10 inches away if possible, and note the

lens-opening number on the **Light Level Indicator** in the viewfinder.

2 Step back to the original position and turn the **Manual Setting Dial** from **AUTO**, to the number shown and expose the scene. By doing this, the correct exposure for just the subject alone will be obtained.

There may be other times where you wish to use manual lens openings instead of the electric eye. This chart gives the lens openings to use for average subjects under different lighting conditions.

	Bright Sun	Hazy Sun	Cloudy Bright	Cloudy Dull
Kodachrome Daylight	6	5	4	3
Kodachrome II Daylight	7	6	5	4
Ansco Moviechrome 8	7	6	5	4
ASA 40 Film	8	7	6	5

Movies Up Close

Your camera's lens stays in focus throughout the zoom range: The chart shows the minimum distance you can take movies for normal, telephoto and wide angle positions at each lens opening. Movies taken at shorter distances may not be clear.

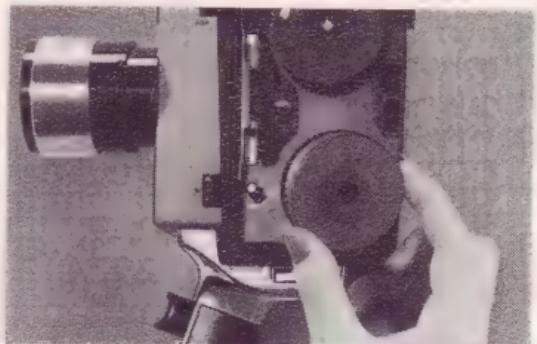
When taking movies at distances under 5 feet, allow a little more room at the top of your picture as you look through the viewfinder to account for parallax.

MINIMUM DISTANCES FOR CLOSE-UPS

Lens Opening	2	3	4	5	6	7	8
Normal (12½mm)	5¾'	5¼'	4½'	3¾'	3¼'	2½'	2'
Wide Angle (9.5mm)	5½'	4¾'	4'	3½'	2¾'	2½'	1¾'
Telephoto (27mm)	13'	11½'	10'	8½'	6¾'	5½'	4¼'

Unloading

After the second half of the film has been exposed and the counter reads "E", open the cover in subdued light and carefully remove the full spool. Replace the paper band that came with it or secure with a rubber band and place the spool in the metal can. Then promptly take it to your dealer for processing. Put the empty spool back on the lower spindle and you are ready for your next roll of film.



Care and Cleaning

Your Argus M4 Zoom Movie Camera is a fine precision instrument and deserves the best care. Protect it from jarring or vibration and from extremes of heat, moisture, and dust. Keep the camera in the carrying case (available as an accessory from your dealer) when not in use.

Clean out the interior of the camera occasionally with a small camel's hair brush. Be sure to brush away any dirt or particles that may be underneath the pressure plate and in the film gate as they may show up in your movies. **Do not remove the pressure plate.** Never oil any part of your camera.

To clean any of the lens surfaces, blow dust off first then use a camel's hair brush or lens tissue. Use lens cleaning fluid sparingly and only if it becomes necessary.

For information on the operation of your camera, servicing or replacement parts, see your Argus dealer or authorized service location (see back cover), or write to:

CUSTOMER SERVICE DEPARTMENT
ARGUS, INCORPORATED
ANN ARBOR, MICHIGAN

When writing, be sure to mention you have the **Argus M4 Power Zoom Movie Camera**, and list the serial number found on bottom of camera.

Battery Life

Type	Average Life
Standard Carbon Zinc.....	5 rolls
Heavy Duty Carbon Zinc....	8 rolls
Alkaline	25 rolls
Mercury	36 rolls

Specifications

Lens: Argus Multiscope, f/1.9, 9mm-27mm variable focal length, coated, color-corrected anastigmat.

Shutter: Governor-controlled rotary shutter operates at 16 frames per second. Shutter speed for continuous-run or single-frame exposures is 1/40 second.

Lens Openings: Automatically set by electric eye when Film Speed Dial is set to an ASA index. Lens opening being set appears in the viewfinder. Manual openings run from AV2 through AV8. Equivalent f/stops:

Aperture Value	2	3	4	5	6	7	8
f/stop	1.9	2.8	4	5.6	8	11	16

Motor: Permanent magnet, 6-volt DC-type, powered by four 1.5-volt pen-light-type batteries.

Film Speed Settings: The electric eye can be set for films from ASA 10 through ASA 40.

Construction: Die-cast metal throughout. Dimensions (camera alone): 5½" x 7" x 2¼". Weight 51 oz.

Cut off this card and keep it in wallet for future reference.

Check List for Outdoor Movies

1. Check the batteries, replace if necessary.
2. Load the camera and run the film until indicator shows "0".
3. Set the ASA film speed on the film speed dial.
4. Preview the picture using the manual zoom sleeve.
5. Hold the camera steady and press the release.

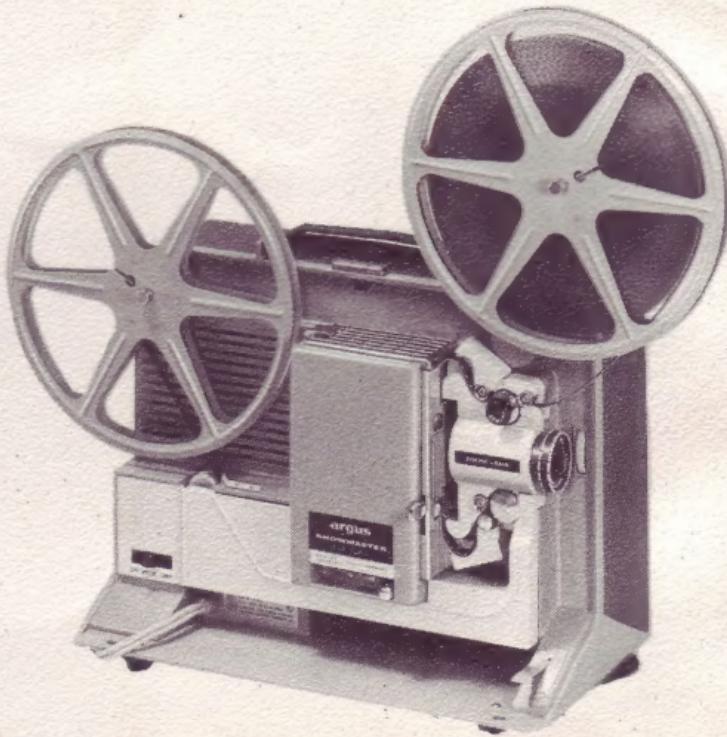
Remember, when film has been through camera only once, it is just half-exposed. Turn spool over and reload. When completely exposed, film will be back on its original spool.

Phone			
Street			
City & State			
Owner's Name			
Camera Serial Number			

**Argus M4 Zoom Movie Camera
Owner's Identification Card**

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New Showmaster 500AZ



with Full Autoload

Here's the perfect companion to your M4 movie camera. The new Showmaster 500AZ 8mm movie projector with the Sylvania Tru-Flector lamp shows your movies with 500-watt brilliance. Automatic load completely takes over the film threading operation. The new Argus f/1.5 Multiscope Zoom lens gives you clear, sharp pictures from anywhere in the room. A single lever controls forward, reverse, or "stills." Long 33-minute shows with the 400-foot reel capacity. Easy to carry and store since it's only 10 $\frac{3}{4}$ x 6 $\frac{1}{2}$ x 8 inches in size.



Carrying Case

Here is the best way to protect your movie camera from dust, moisture, and hard knocks. This fine genuine leather case is designed to hold your camera with pistol grip attached. Provision has been made for extra film. Shoulder strap with pad included.

ARGUS, INCORPORATED, CHICAGO 48, ILLINOIS

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Argus unconditional guarantee

Your Argus M4 Zoom Movie Camera is unconditionally guaranteed by the manufacturer to operate properly for a period of one year from date of original purchase. If, during this period, your camera fails to operate for any reason, Argus, Incorporated, will restore it to operating condition at no charge to you. (This includes all parts and labor.)

This unconditional guarantee applies to the product itself. We regret that we are unable to assume liability for loss of film or for other expense or inconvenience.

This unconditional guarantee is valid only for the original retail purchaser and only if the product is returned prepaid, directly or through an Argus dealer, to the Customer Service Department, Argus, Incorporated, Ann Arbor, Michigan, or their authorized service location listed below. The date and place of original purchase must be included along with a description of the difficulties encountered.

Many apparent product difficulties are actually a matter of incorrect usage. Therefore, it is always wise to see your Argus dealer before returning the product for servicing.

CUSTOMER SERVICE DEPARTMENT, ARGUS, INCORPORATED

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